

## SEQUENCE LISTING

<110> Lin, Lih-Ling  
Yannoni, Yvonne

<120> MK2 Interacting Proteins

<130> 08702.0097-00304

<150> USSN 60/400,044

<151> 2002-08-02

<160> 6

<170> PatentIn version 3.1

<210> 1

<211> 3312

<212> DNA

<213> Homo sapiens

<400> 1

```

cccacgcgtc cgggggacgg ttgctgagcg ggcctgggac agcgggtcgc ggcacctccc      60
gcctgcgcgt gtctaataccg tctgtcgggt cccgaaagag ctaagccgag cctgcgcgcg      120
acgggtgggc tggactgaga gaattctctg agctgggtgac aggtgccaca ggcactgggg      180
atctcaccag aaaggaaccg acggagctag gggccagcga gatggcggac gaggccttag      240
ctgggctgga tgagggagcc cttcggaagc tgctggaggt cacagcagat ctggcagagc      300
ggcggcgcgt ccgctcagcc atccgggaac tgcagcggca ggagctggag cgcgaggagg      360
aggccctggc atccaagcgt ttccgtgccg agcggcagga caacaaggag aactggctgc      420
actctcagca gcgggaagct gagcagcggg ctgccctggc acggctggca gggcagctgg      480
agtccatgaa cgatgtggag gaattgactg cactgttgcg aagcgttgt gagtatgagg      540
agcgcaagct gatccgagct gccatccgcc gtgtacgggc tcaggagatt gaggctgcc      600
ccttggtctg gaggttgtac agcgggcgtc ccaacagtgg ctcaagagag gacagcaagg      660
ggctagcggc acacaggctg gaacagtgtg aggtgccaga gcgagaggaa caggaaacagc      720
aggcagaggt ttcaaagcca acccccaccc ctgaaggcac cagccaggat gtgaccacag      780
tgacactcct gctgcgagcc ccacctggga gcacatccag ctcacctgcc tcaccagca      840
gttcacccac ccctgcctct cctgagcctc cattggagcc tgccgaggcc cagtgcotta      900
cagctgaggt tccaggcagc ccagagccac cccccagccc acccaagacc accagccctg      960
agcctcagga gtctccaacg ctccccagca ctgagggccca ggtggtcaac aagcttctgt      1020
ctggccccaag agagaccctt gctgcccaga gccccaccag agggccctct gacaccaaga      1080
gagcagacgt ggctggaccc cgaccctgcc aacgctccct gtcggtgctc agcccccgcc      1140
aaccagccca gaaccgagag tccaccccc ttgccagcgg accttctca ttccagcggg      1200

```

ctggctctgt	gcgggatcgt	gtccacaagt	tcacatctga	ttctcctatg	gctgctaggc	1260
tccaggatgg	cacaccccag	gctgccctaa	gtcccctgac	ccccgcaagg	ctcctgggcc	1320
cctccctcac	cagcaccacc	cctgcctcct	cctccagcgg	ctcctcctct	cggggccccca	1380
gtgatacctc	ctcccggttc	agcaaggagc	aacgaggagt	agcccagccc	ctggcccagc	1440
ttcgaagctg	cccccaggag	gagggccccca	gggggcgggg	cttggctgct	aggccccttg	1500
aaaacagagc	aggggggcct	gtggcacggt	cagaggagcc	tggtgccccg	ctgcccgtagg	1560
ccgtcggcac	tgccgagcca	gggggcagta	tgaagaccac	attcaccatc	gagatcaagg	1620
acggccgtgg	ccaggcctcc	acaggccggg	tgctgctgcc	cacaggcaac	cagagggcag	1680
aactgacact	ggggctgcgg	gcgcccccg	ccctactcag	caccagtagt	gggggcaaga	1740
gcaccatcac	ccgtgtcaac	agccctggga	ccctggctcg	gctgggcagt	gtcactcatg	1800
tcaccagctt	cagccatgcc	ccccccagta	gccgaggagg	ctgcagcatc	aagatggaac	1860
cagagccagc	agagcctctc	gctgcagcag	tgaagcggc	caatggggct	gagcagaccc	1920
gagtgaacaa	agcaccagaa	gggcggagcc	ctctgagcgc	tgaggagctg	atgactattg	1980
aggatgaagg	agtcttggac	aagatgctgg	atcagagcac	ggactttgaa	gagcgggaagc	2040
tcatccgggc	tgcacttcgt	gagctccgac	aaaggaagag	agaccagcgg	gacaaggagc	2100
gggaacggcg	gctgcaggag	gcacggggcc	ggccagggga	ggggcgcggc	aacacagcca	2160
ctgagaccac	cacgaggcac	agccagcggg	cagctgatgg	ctctgctgtc	agcactgtta	2220
ccaagactga	gcggctcgtc	cactccaatg	atggcacacg	gacggcccgc	accaccacag	2280
tggagtcgag	tttcgtgagg	cgctcggaga	atggcagtgg	cagcaccatg	atgcaaacca	2340
agaccttctc	ctcttcctcc	tcatccaaga	agatgggcag	catcttcgac	cgcgaggacc	2400
aggccagccc	acgggcccgc	agcctggcgg	cgctcgagaa	acggcaggcc	gagaagaaga	2460
aagagctgat	gaaggcgag	agtctgccc	agacctcagc	ctcccaggcg	cgcaaggcca	2520
tgattgagaa	gctggagaag	gagggcgcg	ccggcagccc	tggcggaccc	cgcgagccg	2580
tgcagcgatc	caccagcttc	ggggtcccca	acgccaacag	catcaagcag	atgctgctgg	2640
actgggtgtc	agccaagact	cgcggtacg	agcacgtcga	catccagaac	ttctcctcca	2700
gctggagtga	tgggatggcc	ttctgtgccc	tggtgcacaa	cttcttcct	gaggccttcg	2760
actatgggca	gcttagccct	cagaaccgac	gccagaactt	cgagggtggc	ttctcatctg	2820
cggagaccca	tgcggaactg	ccgcagctcc	tggatacaga	ggacatggtg	cggttcgag	2880
agcctgactg	gaagtgcgtg	tacacgtaca	tccaggaatt	ctaccgctgt	ctgggtccaga	2940
aggggctggt	aaaaaccaaa	aagtcctaac	ccctgctcgg	ggccccacgg	atgctggtgg	3000

3/15

actgtgtgcc cctggtggag gtggacgaca tgatgatcat gggcaagaag cctgacccca 3060  
 agtgtgtctt cacctatgtg cagtcgctct acaaccacct gcgacgccac gaactgcgcc 3120  
 tgcgcggcaa gaatgtctag cctgcccgcc cgcattggcca gccagtggca agctgccgcc 3180  
 cccactctcc gggcaccgtc tccctgcctgt gcgtccgccc accgctgccc tgtctgttgc 3240  
 gacaccctcc cccccacata cacacgcagc gttttgataa attattgggt ttcaacgaaa 3300  
 aaaaaaaaaa aa 3312

<210> 2  
 <211> 2555  
 <212> DNA  
 <213> Homo sapiens

<400> 2  
 ggcgcgcgat gtgtctccgc ggcggtgca gccctcgagc gcccgccgcc gcgccccaac 60  
 cccggccgcc gccgcacct ccgccccggc ctgcgcgcc cgteccggcc tcgcgccccg 120  
 gccgcctttt gttgacgcgc gccaggccgt gcggtcggat gcgcgcggc agccccgggc 180  
 cccggctcgg aggtctcccg ggcgagagga ggcggccgc cggccgggac cccgcgcgag 240  
 tcggcccccg ccaggggctg cgtaggcccc cccggccagg ccagccgcc tggacagaga 300  
 cagggcaggg cattgttcat gcactgaccg acctcagcat ccccgcatg acctcagga 360  
 acggaaactc tgctccagc atcgccggca ctgccccca gaatggtgag aataaaccac 420  
 cacaggccat tgtgaaacct caaatcctga cgcattgtat cgaagggttt gtgatccagg 480  
 agggggcgga cgtttcccg tgggacgctc gtctgttgtt ggggaatctc aagaagaagt 540  
 atgcacaggg gttcctgcct gagaaactc cacagcagga tcacaccacc accactgact 600  
 cggagatgga ggagccctat ctgcaagaat ccaaagagga ggggtgctcc ctcaaactca 660  
 agtgtgagct ctgtggccgc gtggactttg cctataagtt caagcgttcc aagcgttct 720  
 gttccatggc ttgtgcaaag aggtacaacg tgggatgcac caaacgggtg ggacttttcc 780  
 actcagaccg gagcaagctg cagaaggcag gagctgcgac ccacaaccgc cgtcggccag 840  
 caaagccagt ctgccaccac ttaccaagga taccaagaag cagccaacag gcactgtgcc 900  
 cctttcggtt actgctgctt tgcgtaacac acagccagga agactccagc cgttgctcag 960  
 ataactcaag ctatgaggaa cccttgctac ccatctcagc cagctcatct acttccgccg 1020  
 gcgacaaggc cagcgggacc tggagctccc cgacatgcac atgcgggacc tgggtgggcat 1080  
 gggacaccac ttctgcca gtgagccacc aagtgaatgt agaagacgtc tacgaattca 1140  
 tccgctctct gccaggctgc caggagatag cagaggaatt ccgtgccag gaaatcgacg 1200  
 ggcaagccct gctgctgctc aaggaggacc acctgatgag cgttatgaac atcaagctgg 1260

4/15

```

ggcccgccct gaagatctac gcccgcatca gcatgctcaa ggactcctag ggctggtggc 1320
accaggattc tggcccaggg cgcctcctcc cgactgagca gagccagaca gacattcctg 1380
aggggcccag aaatggcggc gttggagggc aggggctctc cctaggggca tagctggtga 1440
ggaggtctgg gcacctctc catggctctc aggggccttt catttctgtg ggaggggcag 1500
agaggtaggt ggcacagaag atggggcttt atgcttgtaa atattgatag cactggcttc 1560
ctccaaagtc ccaatactct agccccgctc tcttcccctc tttctgtccc ccattttcca 1620
gggggtatat ggtcagggct ccccaacctg agttggttac ttcaagggca gccagcaggc 1680
ctggatggag gcctagaaag cccttgctt ccttctctcc acttcttctt ccaggcctgg 1740
ttaactcttc cgttgtcagc ttctccccct tcagcctggt tctgcagcag ccagggttct 1800
ccccctaca ccctctgcag gtggagagag agaagctggg ccagccgcg gtgcctgctg 1860
gccaagacgc cttaacgctg tgtgtatgac tgtgtgactg tgtgggagcc tggactgaca 1920
gataggccaa gggctactct ctggcatctc cagggtgttt gtagcaaaca gccacttagt 1980
gctttgtcct ggactccact cagcctcagg atggggaata gccaagaatg gcagcctcag 2040
cgagaggca aggtcagaaa gagacggcgc ttcagagttt cctttccaga caccctccc 2100
cgactgtga agttcccctg accgccctcc tggttcaca agagcattaa gaaagctgcg 2160
gtggtctgag caacatagcc cagacgtgga gcctcctggc ctgcctgccc gccaccctg 2220
ggagtccagt ggtgaggctc agagaacttc taaggggaaa gaacagctgg agtttctgtt 2280
gatgtgaaga aggcagctct tggcctccca ctccacact tctttgccta taaatcttcc 2340
tagcagcaat ttgagctacc tgaggaggag gcagggcaga agggcaaggg cctgcctctg 2400
acctgccgtg tcctttgcag gaaggaggta ggcaccttc tgagcttatt ctattcccca 2460
cccacacccc caggcagggt tggaaatgaa ggactttttt aacctttgtt ttgtttttta 2520
aaaataaatc tgtaaatctt gaaaaaaaaa aaaaa 2555

```

<210> 3  
<211> 3664  
<212> DNA  
<213> Homo sapiens

```

<400> 3
atggggcctg aaactgtctg ggtctgagct ggggagcgga agccacttgt ccctctccct 60
ccccaggact tctgtgactc ctgggccaca gaggtccaac cagggttaagg gcctggggat 120
acccctgcc tggccccctt gcccaactg gcaggggggc caggctgggc agcagccct 180
ctttcacctc aactatggat ctctgcccc ccaagcccaa gtacaatcca ctccggaatg 240
agtctctgtc atcgctggag gaaggggctt ctgggtccac cccccggag gagctgcctt 300

```

```

ccccatcagc ttcatccctg gggcccatcc tgcctcctct gcctggggac gatagtccca 360
ctaccctgtg ctcttcttcc ccccgatga gcaacctgag gctggccaac cgggctgggg 420
ggcgcccagg gtctaagggg gagccaggaa gggcagctga tgatggggag gggatcgatg 480
gggcagccat gccagagtca ggccccctac cctcctcca ggacatgaac aagctgagtg 540
gaggcgggcg gcgcaggact cgggtggaag ggggccagct tgggggagag gagtggaccc 600
gccacgggag ctttgtcaat aagcccacgc ggggctggct gcatcccaac gacaaagtca 660
tgggaccccg ggtttcttac ttggttcggt acatgggttg tgtggaggtc ctccagtcaa 720
tgcgtgccct ggacttcaac acccgagctc aggtcaccag ggaggccatc agtctggtgt 780
gtgaggctgt gccgggtgct aagggggcga caaggaggag aaagccctgt agccgccccgc 840
tcagctctat cctggggagg agtaacctga aatttgctgg aatgccaatc actctcaccg 900
tctccaccag cagcctcaac ctcatggccg cagactgcaa acagatcatc gccaaccacc 960
acatgcaatc tatctcattt gcatccggcg gggatccgga cacagccgag tatgtcgctt 1020
atgttgccaa agaccctgtg aatcagagag cctgccacat tctggagtgt cccgaagggc 1080
ttgcccagga tgtcatcagc accattggcc aggccttcga gttgcgcttc aaacaatacc 1140
tcaggaaccc acccaaactg gtcacccctc atgacaggat ggctggcttt gatggctcag 1200
catgggatga ggaggaggaa gagccacctg accatcagta ctataatgac ttcccgggga 1260
aggaaccccc cttggggggg gtggtagaca tgaggcttcg ggaaggagcc gctccagggg 1320
ctgctcgacc cactgcaccc aatgcccaga cccccagcca cttgggagct acattgcctg 1380
taggacagcc tggtggggga gatccagaag tccgcaaaca gatgccacct ccaccacct 1440
gtccaggcag agagcttttt gatgatccct cctatgtcaa cgtccagaac ctagacaagg 1500
cccggcaagc agtgggtggt gctgggcccc ccaatcctgc tatcaatggc agtgcacccc 1560
gggacctgtt tgacatgaag cccttcgaag atgctcttcg ggtgcctcca cctccccagt 1620
cgggtgtccat ggctgagcag ctccgagggg agccctggtt ccatgggaag ctgagccggc 1680
gggaggctga ggcactgctg cagctcaatg gggacttctt ggtacgggag agcacgacca 1740
cacctggcca gtatgtgctc actggcttgc agagtgggca gcctaagcat ttgctactgg 1800
tggaccctga ggggtgtggt cggaactaagg atcaccgctt tgaaagtgtc agtcacctta 1860
tcagctacca catggacaat cacttgccca tcctctctgc gggcagcgaa ctgtgtctac 1920
agcaacctgt ggagcggaaa ctgtgatctg ccctagcgct ctcttcagga agatgccctc 1980
caatcctttc caccctattc cctaactctc gggacctcgt ttgggagtgt tctgtgggct 2040
tggccttgtg tcagagctgg gagtagcatg gactctgggt ttcatatcca gctgagttag 2100
agggtttgag tcaaaagcct gggtgagaat cctgcctctc cccaaacatt aatcaccaaa 2160

```

```

gtattaatgt acagagtggc cctcacctg ggcctttcct gtgccaacct gatgccctt 2220
ccccaagaag gtgagtgctt gtcattgaaa atgtcctgtg gtgacaggcc cagtggaaaca 2280
gtcaccccttc tgggcaagg ggaacaaatc acacctctgg gcttcagggt atcccagacc 2340
cctctcaaca cccgcccccc ccatgtttta actttgtgcc ttgaccatc tcttaggtct 2400
aatgatattt tatgcaaaca gttcttggac cctgaattc ttcaatgaca gggatgccaa 2460
caccttcttg gcttctggga cctgtgttct tgctgagcac cctctcgggt ttgggttggg 2520
ataacagagg caggagtggc agctgtcccc tctccctggg gatatgcaac ccttagagat 2580
tgccccagag cccactccc ggccaggcgg gagatggacc cctcccttgc tcagtgcctc 2640
ctggccgggg cccctcacc caaggggtct gtatatacat ttcataaggc ctgccctccc 2700
atgttgcatg cctatgtact ctgcgcaaaa gtgcagccct tctcctgaa gcctctgccc 2760
tgccctccct tctgggaggg cggggtgggg gtgactgaat ttgggctct tgtacagtta 2820
actctcccag gtggattttg tggaggtgag aaaaggggca ttgagactat aaagcagtag 2880
acaatcccca cataccatct gtagagttgg aactgcattc ttttaaagtt ttatatgcat 2940
atattttagg gctgctagac ttactttcct attttctttt ccattgctta ttcttgagca 3000
caaaatgata atcaattatt acatttatac atcacctttt tgacttttcc aagccctttt 3060
acagctcttg gcattttcct cgctaggcc tgtgaggtaa ctgggatcgc accttttata 3120
ccagagacct gaggcagatg aaatttatct ccatctagga ctagaaaaac ttgggtctct 3180
taccgcgaga ctgagaggca gaagtcagcc cgaatgcctg tcagtttcat ggaggggaaa 3240
cgcaaaacct gcagttcctg agtaccttct acaggcccg cccagcctag gcccggggtg 3300
gccacaccac agcaagccgg cccccctct tttggccttg tggataagg agagttgacc 3360
gttttcatcc tggcctcctt ttgctgtttg gatgtttcca cgggtctcac ttataccaaa 3420
gggaaaactc ttcattaaag tccgtatttc ttctaaaaaa aaaaaaaaaa aaatacattt 3480
atacatcacc tttttgactt ttccaagccc ttttacagct ctgggcattt tctcgccta 3540
ggcctgtgag gtaactggga tcgcacctt tataccagag acctgaggca gatgaaattt 3600
atttccatct aggactagaa aaacttgggt ctcttaccgc gagactgaga ggcagaagtc 3660
agcc 3664

```

<210> 4  
 <211> 915  
 <212> PRT  
 <213> Homo sapiens

<400> 4

7/15

Met Ala Asp Glu Ala Leu Ala Gly Leu Asp Glu Gly Ala Leu Arg Lys  
 1 5 10 15

Leu Leu Glu Val Thr Ala Asp Leu Ala Glu Arg Arg Arg Ile Arg Ser  
 20 25 30

Ala Ile Arg Glu Leu Gln Arg Gln Glu Leu Glu Arg Glu Glu Glu Ala  
 35 40 45

Leu Ala Ser Lys Arg Phe Arg Ala Glu Arg Gln Asp Asn Lys Glu Asn  
 50 55 60

Trp Leu His Ser Gln Gln Arg Glu Ala Glu Gln Arg Ala Ala Leu Ala  
 65 70 75 80

Arg Leu Ala Gly Gln Leu Glu Ser Met Asn Asp Val Glu Glu Leu Thr  
 85 90 95

Ala Leu Leu Arg Ser Ala Gly Glu Tyr Glu Glu Arg Lys Leu Ile Arg  
 100 105 110

Ala Ala Ile Arg Arg Val Arg Ala Gln Glu Ile Glu Ala Ala Thr Leu  
 115 120 125

Ala Gly Arg Leu Tyr Ser Gly Arg Pro Asn Ser Gly Ser Arg Glu Asp  
 130 135 140

Ser Lys Gly Leu Ala Ala His Arg Leu Glu Gln Cys Glu Val Pro Glu  
 145 150 155 160

Arg Glu Glu Gln Glu Gln Gln Ala Glu Val Ser Lys Pro Thr Pro Thr  
 165 170 175

Pro Glu Gly Thr Ser Gln Asp Val Thr Thr Val Thr Leu Leu Leu Arg  
 180 185 190

Ala Pro Pro Gly Ser Thr Ser Ser Ser Pro Ala Ser Pro Ser Ser Ser  
 195 200 205

Pro Thr Pro Ala Ser Pro Glu Pro Pro Leu Glu Pro Ala Glu Ala Gln  
 210 215 220

Cys Leu Thr Ala Glu Val Pro Gly Ser Pro Glu Pro Pro Pro Ser Pro  
 225 230 235 240

Pro Lys Thr Thr Ser Pro Glu Pro Gln Glu Ser Pro Thr Leu Pro Ser

8/15

245

250

255

Thr Glu Gly Gln Val Val Asn Lys Leu Leu Ser Gly Pro Lys Glu Thr  
 260 265 270

Pro Ala Ala Gln Ser Pro Thr Arg Gly Pro Ser Asp Thr Lys Arg Ala  
 275 280 285

Asp Val Ala Gly Pro Arg Pro Cys Gln Arg Ser Leu Ser Val Leu Ser  
 290 295 300

Pro Arg Gln Pro Ala Gln Asn Arg Glu Ser Thr Pro Leu Ala Ser Gly  
 305 310 315 320

Pro Ser Ser Phe Gln Arg Ala Gly Ser Val Arg Asp Arg Val His Lys  
 325 330 335

Phe Thr Ser Asp Ser Pro Met Ala Ala Arg Leu Gln Asp Gly Thr Pro  
 340 345 350

Gln Ala Ala Leu Ser Pro Leu Thr Pro Ala Arg Leu Leu Gly Pro Ser  
 355 360 365

Leu Thr Ser Thr Thr Pro Ala Ser Ser Ser Ser Gly Ser Ser Ser Arg  
 370 375 380

Gly Pro Ser Asp Thr Ser Ser Arg Phe Ser Lys Glu Gln Arg Gly Val  
 385 390 395 400

Ala Gln Pro Leu Ala Gln Leu Arg Ser Cys Pro Gln Glu Glu Gly Pro  
 405 410 415

Arg Gly Arg Gly Leu Ala Ala Arg Pro Leu Glu Asn Arg Ala Gly Gly  
 420 425 430

Pro Val Ala Arg Ser Glu Glu Pro Gly Ala Pro Leu Pro Val Ala Val  
 435 440 445

Gly Thr Ala Glu Pro Gly Gly Ser Met Lys Thr Thr Phe Thr Ile Glu  
 450 455 460

Ile Lys Asp Gly Arg Gly Gln Ala Ser Thr Gly Arg Val Leu Leu Pro  
 465 470 475 480

Thr Gly Asn Gln Arg Ala Glu Leu Thr Leu Gly Leu Arg Ala Pro Pro  
 485 490 495



Thr Leu Leu Ser Thr Ser Ser Gly Gly Lys Ser Thr Ile Thr Arg Val  
500 505 510

Asn Ser Pro Gly Thr Leu Ala Arg Leu Gly Ser Val Thr His Val Thr  
515 520 525

Ser Phe Ser His Ala Pro Pro Ser Ser Arg Gly Gly Cys Ser Ile Lys  
530 535 540

Met Glu Pro Glu Pro Ala Glu Pro Leu Ala Ala Val Glu Ala Ala  
545 550 555 560

Asn Gly Ala Glu Gln Thr Arg Val Asn Lys Ala Pro Glu Gly Arg Ser  
565 570 575

Pro Leu Ser Ala Glu Glu Leu Met Thr Ile Glu Asp Glu Gly Val Leu  
580 585 590

Asp Lys Met Leu Asp Gln Ser Thr Asp Phe Glu Glu Arg Lys Leu Ile  
595 600 605

Arg Ala Ala Leu Arg Glu Leu Arg Gln Arg Lys Arg Asp Gln Arg Asp  
610 615 620

Lys Glu Arg Glu Arg Arg Leu Gln Glu Ala Arg Gly Arg Pro Gly Glu  
625 630 635 640

Gly Arg Gly Asn Thr Ala Thr Glu Thr Thr Thr Arg His Ser Gln Arg  
645 650 655

Ala Ala Asp Gly Ser Ala Val Ser Thr Val Thr Lys Thr Glu Arg Leu  
660 665 670

Val His Ser Asn Asp Gly Thr Arg Thr Ala Arg Thr Thr Thr Val Glu  
675 680 685

Ser Ser Phe Val Arg Arg Ser Glu Asn Gly Ser Gly Ser Thr Met Met  
690 695 700

Gln Thr Lys Thr Phe Ser Ser Ser Ser Ser Lys Lys Met Gly Ser  
705 710 715 720

Ile Phe Asp Arg Glu Asp Gln Ala Ser Pro Arg Ala Gly Ser Leu Ala  
725 730 735

Ala Leu Glu Lys Arg Gln Ala Glu Lys Lys Lys Glu Leu Met Lys Ala  
740 745 750

Gln Ser Leu Pro Lys Thr Ser Ala Ser Gln Ala Arg Lys Ala Met Ile  
755 760 765

Glu Lys Leu Glu Lys Glu Gly Ala Ala Gly Ser Pro Gly Gly Pro Arg  
770 775 780

Ala Ala Val Gln Arg Ser Thr Ser Phe Gly Val Pro Asn Ala Asn Ser  
785 790 795 800

Ile Lys Gln Met Leu Leu Asp Trp Cys Arg Ala Lys Thr Arg Gly Tyr  
805 810 815

Glu His Val Asp Ile Gln Asn Phe Ser Ser Ser Trp Ser Asp Gly Met  
820 825 830

Ala Phe Cys Ala Leu Val His Asn Phe Phe Pro Glu Ala Phe Asp Tyr  
835 840 845

Gly Gln Leu Ser Pro Gln Asn Arg Arg Gln Asn Phe Glu Val Ala Phe  
850 855 860

Ser Ser Ala Glu Thr His Ala Asp Cys Pro Gln Leu Leu Asp Thr Glu  
865 870 875 880

Asp Met Val Arg Leu Arg Glu Pro Asp Trp Lys Cys Val Tyr Thr Tyr  
885 890 895

Ile Gln Glu Phe Tyr Arg Cys Leu Val Gln Lys Gly Leu Val Lys Thr  
900 905 910

Lys Lys Ser  
915

<210> 5  
<211> 433  
<212> PRT  
<213> Homo sapiens

<400> 5

Met Cys Leu Arg Gly Gly Cys Ser Pro Arg Ala Pro Ala Ala Ala Pro  
1 5 10 15

Gln Pro Arg Pro Pro Pro Ala Leu Pro Pro Arg Pro Arg Ala Pro Val

11/15

20

25

30

Pro Ala Ser Arg Pro Gly Arg Pro Leu Leu Thr Pro Ala Arg Pro Cys  
 35 40 45

Gly Arg Met Arg Arg Gly Ser Pro Gly Pro Arg Leu Gly Gly Ser Arg  
 50 55 60

Gly Glu Arg Arg Arg Pro Ala Gly Arg Asp Pro Ala Arg Val Gly Pro  
 65 70 75 80

Gly Gln Gly Leu Arg Arg Pro Ala Arg Pro Gly Pro Ala Ala Trp Thr  
 85 90 95

Glu Thr Gly Gln Gly Ile Val His Ala Leu Thr Asp Leu Ser Ile Pro  
 100 105 110

Gly Met Thr Ser Gly Asn Gly Asn Ser Ala Ser Ser Ile Ala Gly Thr  
 115 120 125

Ala Pro Gln Asn Gly Glu Asn Lys Pro Pro Gln Ala Ile Val Lys Pro  
 130 135 140

Gln Ile Leu Thr His Val Ile Glu Gly Phe Val Ile Gln Glu Gly Ala  
 145 150 155 160

Asp Val Ser Arg Trp Asp Ala Arg Leu Leu Val Gly Asn Leu Lys Lys  
 165 170 175

Lys Tyr Ala Gln Gly Phe Leu Pro Glu Lys Leu Pro Gln Gln Asp His  
 180 185 190

Thr Thr Thr Thr Asp Ser Glu Met Glu Glu Pro Tyr Leu Gln Glu Ser  
 195 200 205

Lys Glu Glu Gly Ala Pro Leu Lys Leu Lys Cys Glu Leu Cys Gly Arg  
 210 215 220

Val Asp Phe Ala Tyr Lys Phe Lys Arg Ser Lys Arg Phe Cys Ser Met  
 225 230 235 240

Ala Cys Ala Lys Arg Tyr Asn Val Gly Cys Thr Lys Arg Val Gly Leu  
 245 250 255

Phe His Ser Asp Arg Ser Lys Leu Gln Lys Ala Gly Ala Ala Thr His  
 260 265 270

Asn Arg Arg Arg Pro Ala Lys Pro Val Cys His His Leu Pro Arg Ile  
 275 280 285

Pro Arg Ser Ser Gln Gln Ala Leu Cys Pro Phe Arg Leu Leu Leu Leu  
 290 295 300

Cys Val Thr His Ser Gln Glu Asp Ser Ser Arg Cys Ser Asp Asn Ser  
 305 310 315 320

Ser Tyr Glu Glu Pro Leu Ser Pro Ile Ser Ala Ser Ser Ser Thr Ser  
 325 330 335

Ala Gly Asp Lys Ala Ser Gly Thr Trp Ser Ser Pro Thr Cys Ile Cys  
 340 345 350

Gly Thr Trp Trp Ala Trp Asp Thr Thr Ser Cys Gln Val Ser His Gln  
 355 360 365

Val Asn Val Glu Asp Val Tyr Glu Phe Ile Arg Ser Leu Pro Gly Cys  
 370 375 380

Gln Glu Ile Ala Glu Glu Phe Arg Ala Gln Glu Ile Asp Gly Gln Ala  
 385 390 395 400

Leu Leu Leu Leu Lys Glu Asp His Leu Met Ser Val Met Asn Ile Lys  
 405 410 415

Leu Gly Pro Ala Leu Lys Ile Tyr Ala Arg Ile Ser Met Leu Lys Asp  
 420 425 430

Ser

<210> 6

<211> 578

<212> PRT

<213> Homo sapiens

<400> 6

Met Asp Leu Leu Pro Pro Lys Pro Lys Tyr Asn Pro Leu Arg Asn Glu  
 1 5 10 15

Ser Leu Ser Ser Leu Glu Glu Gly Ala Ser Gly Ser Thr Pro Pro Glu  
 20 25 30

13/15

Glu Leu Pro Ser Pro Ser Ala Ser Ser Leu Gly Pro Ile Leu Pro Pro  
 35 40 45

Leu Pro Gly Asp Asp Ser Pro Leu Pro Cys Val Pro Ser Phe Pro Arg  
 50 55 60

Met Ser Asn Leu Lys Leu Ala Asn Pro Ala Gly Gly Pro Trp Gly Leu  
 65 70 75 80

Lys Gly Ser Gln Glu Arg Leu Leu Lys Met Gly Lys Gly Val Gln Gly  
 85 90 95

Gln Pro Phe Gly Leu Arg Pro Leu Ala Pro Pro Pro Asp Met Asn Lys  
 100 105 110

Leu Ser Gly Gly Gly Gly Arg Arg Thr Arg Val Glu Gly Gly Gln Leu  
 115 120 125

Gly Gly Glu Glu Trp Thr Arg His Gly Ser Phe Val Asn Lys Pro Thr  
 130 135 140

Arg Gly Trp Leu His Pro Asn Asp Lys Val Met Gly Pro Gly Val Ser  
 145 150 155 160

Tyr Leu Val Arg Tyr Met Gly Cys Val Glu Val Leu Gln Ser Met Arg  
 165 170 175

Ala Leu Asp Phe Asn Thr Arg Thr Gln Val Thr Arg Glu Ala Ile Ser  
 180 185 190

Leu Val Cys Glu Ala Val Pro Gly Ala Lys Gly Ala Thr Arg Arg Arg  
 195 200 205

Lys Pro Cys Ser Arg Pro Leu Ser Ser Ile Leu Gly Arg Ser Asn Leu  
 210 215 220

Lys Phe Ala Gly Met Pro Ile Thr Leu Thr Val Ser Thr Ser Ser Leu  
 225 230 235 240

Asn Leu Met Ala Ala Asp Cys Lys Gln Ile Ile Ala Asn His His Met  
 245 250 255

Gln Ser Ile Ser Phe Ala Ser Gly Gly Asp Pro Asp Thr Ala Glu Tyr  
 260 265 270

Val Ala Tyr Val Ala Lys Asp Pro Val Asn Gln Arg Ala Cys His Ile

14/15

275

280

285

Leu Glu Cys Pro Glu Gly Leu Ala Gln Asp Val Ile Ser Thr Ile Gly  
 290 295 300

Gln Ala Phe Glu Leu Arg Phe Lys Gln Tyr Leu Arg Asn Pro Pro Lys  
 305 310 315 320

Leu Val Thr Pro His Asp Arg Met Ala Gly Phe Asp Gly Ser Ala Trp  
 325 330 335

Asp Glu Glu Glu Glu Glu Pro Pro Asp His Gln Tyr Tyr Asn Asp Phe  
 340 345 350

Pro Gly Lys Glu Pro Pro Leu Gly Gly Val Val Asp Met Arg Leu Arg  
 355 360 365

Glu Gly Ala Ala Arg Pro Thr Leu Pro Ser Ala Gln Met Ser Ser His  
 370 375 380

Leu Gly Ala Thr Leu Pro Ile Gly Gln His Ala Ala Gly Asp His Glu  
 385 390 395 400

Val Arg Lys Gln Met Leu Pro Pro Pro Pro Cys Pro Gly Arg Glu Leu  
 405 410 415

Phe Asp Asp Pro Ser Tyr Val Asn Ile Gln Asn Leu Asp Lys Ala Arg  
 420 425 430

Gln Ala Gly Gly Gly Ala Gly Pro Pro Asn Pro Ser Leu Asn Gly Ser  
 435 440 445

Ala Pro Arg Asp Leu Phe Asp Met Lys Pro Phe Glu Asp Ala Leu Arg  
 450 455 460

Val Pro Pro Pro Pro Gln Ser Met Ser Met Ala Glu Gln Leu Gln Gly  
 465 470 475 480

Glu Pro Trp Phe His Gly Lys Leu Ser Arg Arg Glu Ala Glu Ala Leu  
 485 490 495

Leu Gln Leu Asn Gly Asp Phe Leu Val Arg Glu Ser Thr Thr Thr Pro  
 500 505 510

Gly Gln Tyr Val Leu Thr Gly Leu Gln Ser Gly Gln Pro Lys His Leu  
 515 520 525

Leu Leu Val Asp Pro Glu Gly Val Val Arg Thr Lys Asp His Arg Phe  
530 535 540

Glu Ser Val Ser His Leu Ile Ser Tyr His Met Asp Asn His Leu Pro  
545 550 555 560

Ile Ile Ser Ala Gly Ser Glu Leu Cys Leu Gln Gln Pro Val Asp Arg  
565 570 575

Lys Val